



**STATE OF TENNESSEE**  
**DEPARTMENT OF TRANSPORTATION**  
**ENVIRONMENTAL DIVISION**  
**ENVIRONMENTAL TECHNICAL STUDIES OFFICE**  
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**BUTCH ELEY**  
DEPUTY GOVERNOR &  
COMMISSIONER OF TRANSPORTATION

**BILL LEE**  
GOVERNOR

**MEMORANDUM**

To: Jeff Blevins  
Alternative Delivery-Manager

From: James Ian Quilliams  
Region 2 Ecology-Senior Technical Specialist

Date: 7/1/2025

Subject: Environmental Boundaries Report for:  
Marion Co., Shellmound Rd. LM 1.27 to LM 1.47 Bridge Replacement  
PIN Number: 130902.00

An ecological evaluation of the subject project has been conducted in response to an initial evaluation request with the following results:

**STREAMS:** There is one (1) stream, and one (1) wet weather conveyance identified within the project limits.

**WETLANDS:** There is one (1) wetland identified within the project limits.

**OTHER FEATURES:** There is one (1) pond identified within the project limits.

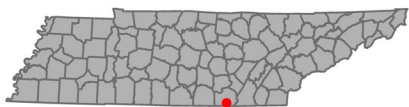
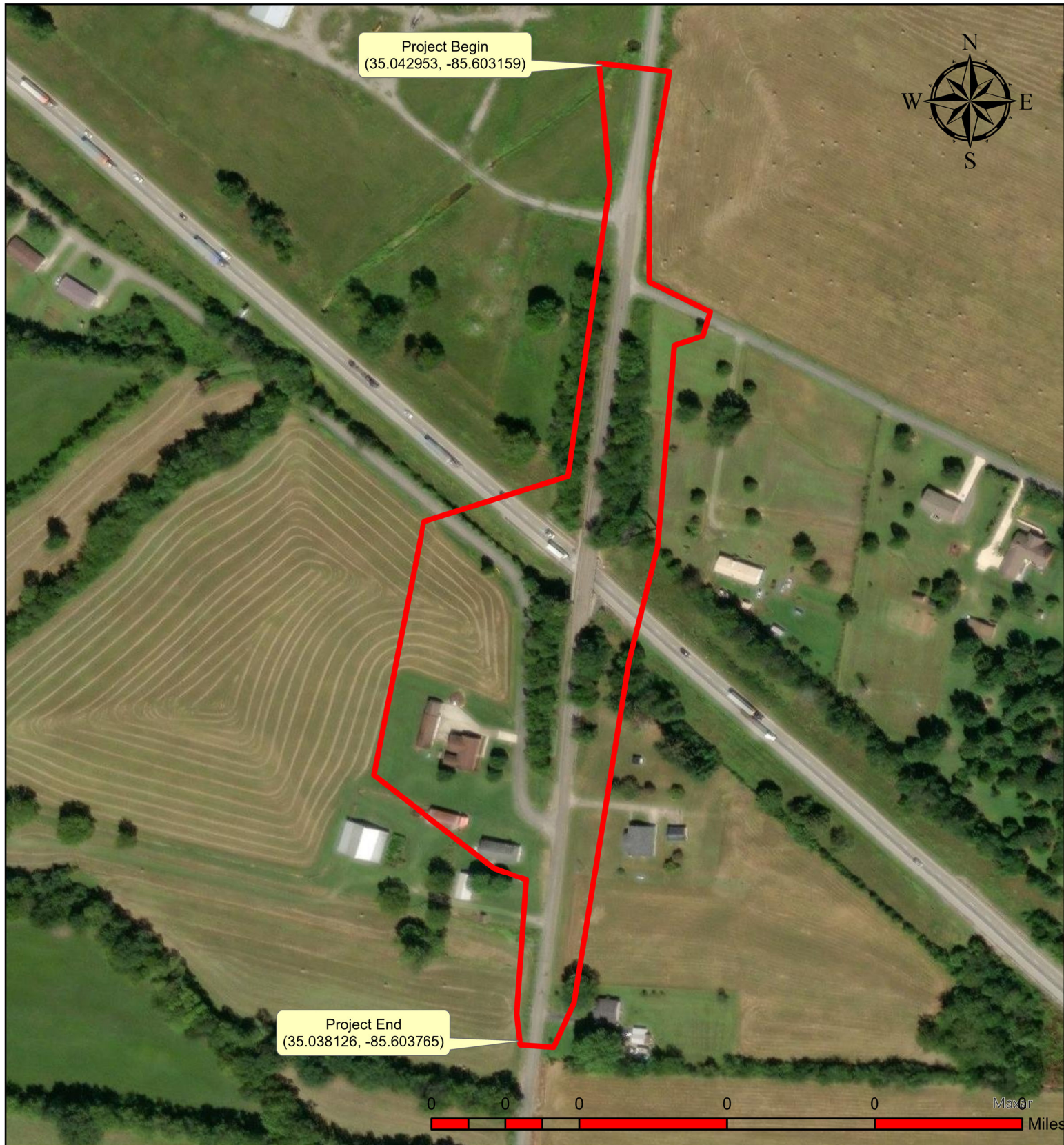
**SPECIES:**

- USFWS: Coordination with USFWS has been completed resulting in a project commitment.
- TWRA: Coordination with TWRA has been completed with no species concerns.
- TDEC DNA: TDOT ecology has determined that the subject project meets condition (1) of the TDEC DNA MOA.

**COMMITMENTS:** All tree clearing activities will take place between November 16<sup>th</sup> and March 31<sup>st</sup>.

Your assistance is appreciated. If you have any questions or comments, please contact me at (423-463-6103) or James.Quilliams@tn.gov.

CC:     Region 2 Environmental Section: Scott Medlin, Chester Sutherland, Colby Mann, Rooney  
          Ramos, Jesse Wooden  
          Region Preconstruction: Doug Ford, Jason Ingram, Rachel Gentry  
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          [TDOT.Env.NEPA@tn.gov](mailto:TDOT.Env.NEPA@tn.gov)



### Project Location Aerial Map

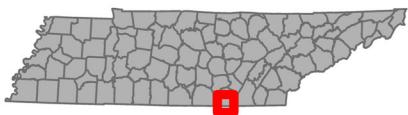
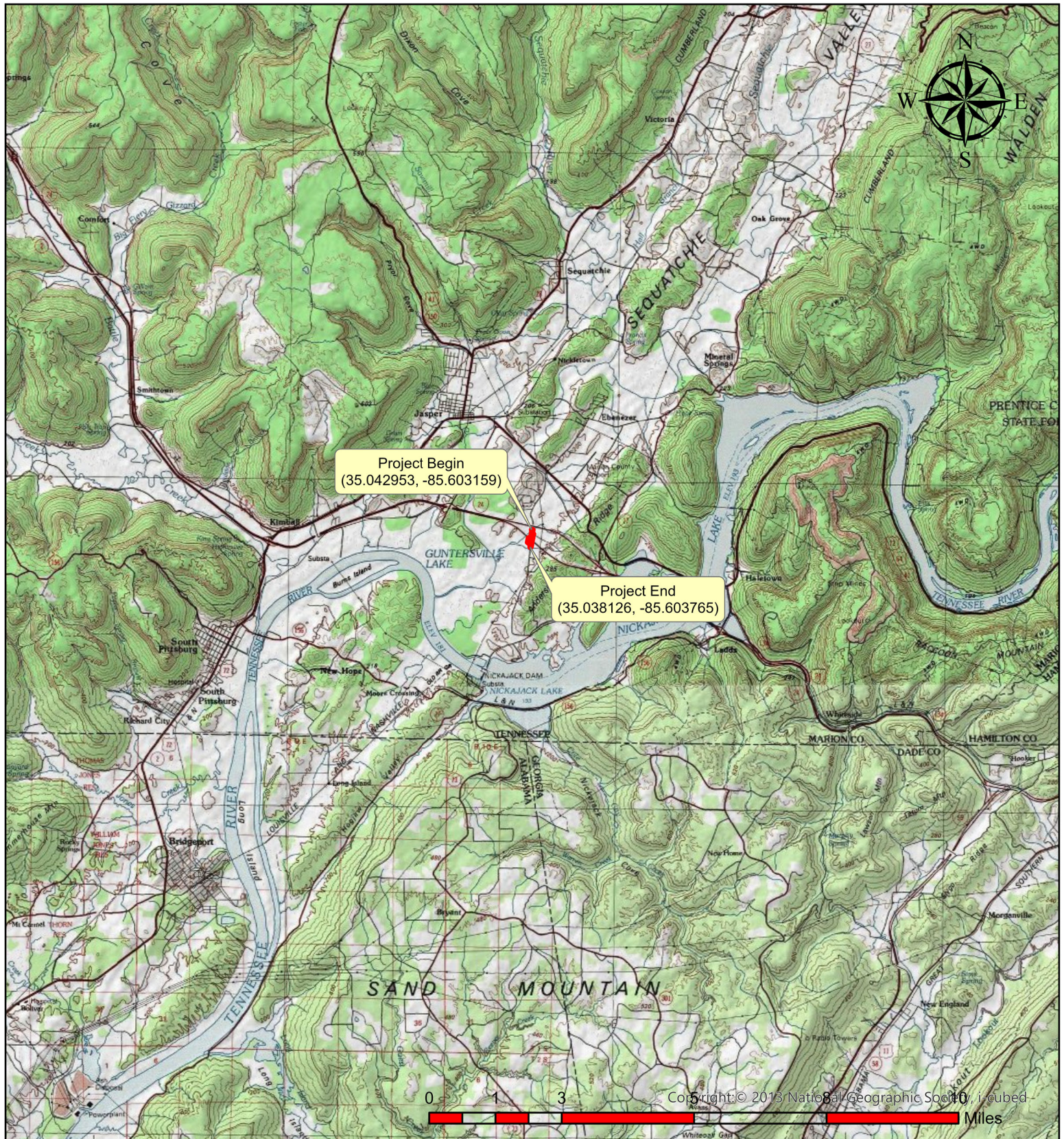
Marion Co., Shellmound Rd. LM 1.27 to LM 1.47 Bridge Replacement

11/1/2024

PIN 130902.00







## Project Location Topographical Map

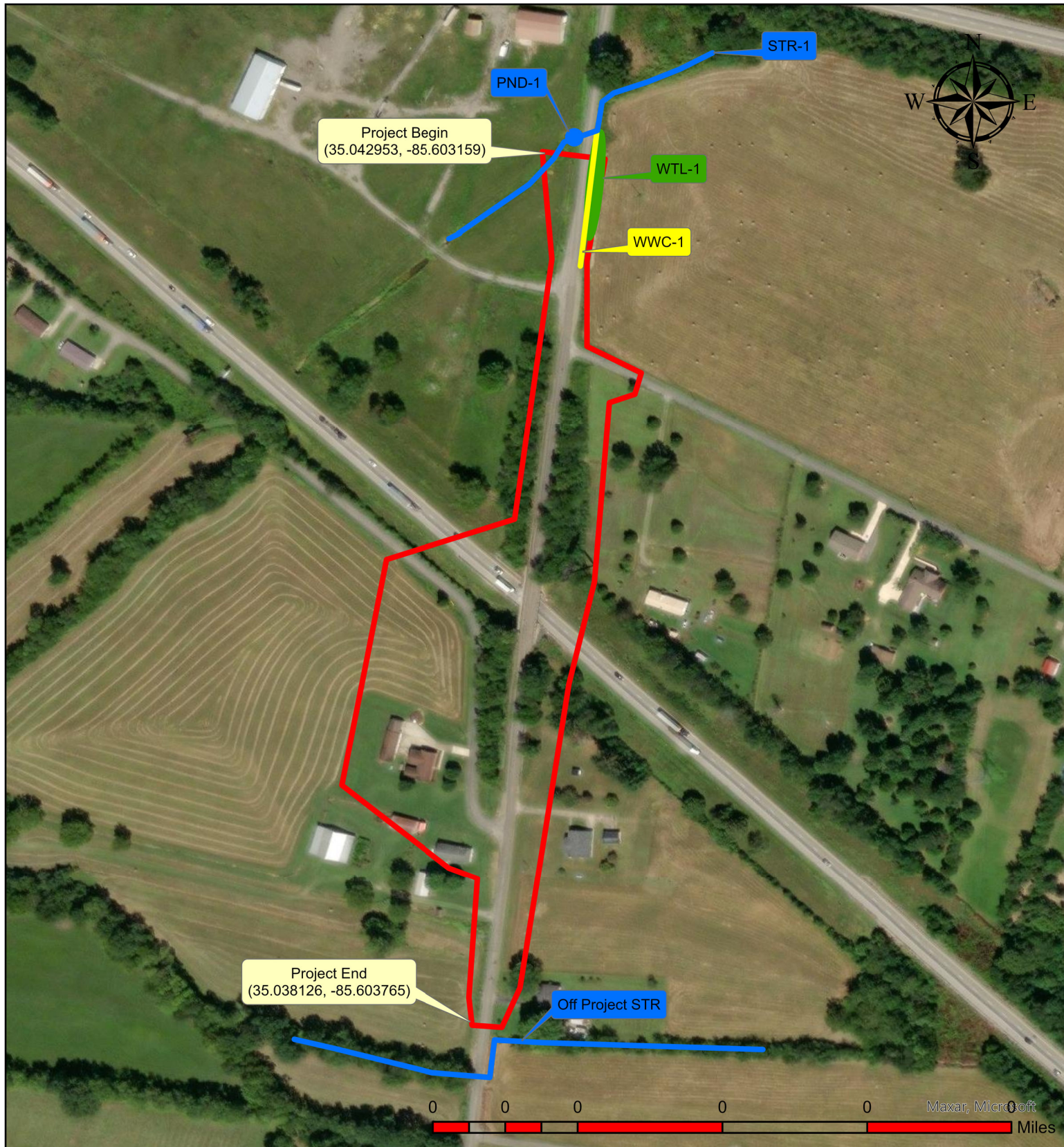
Marion Co., Shellmound Rd. LM 1.27 to LM 1.47 Bridge Replacement

11/1/2024

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### Project Location Water Resource Map

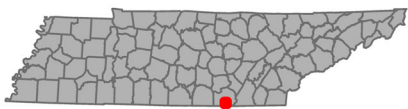
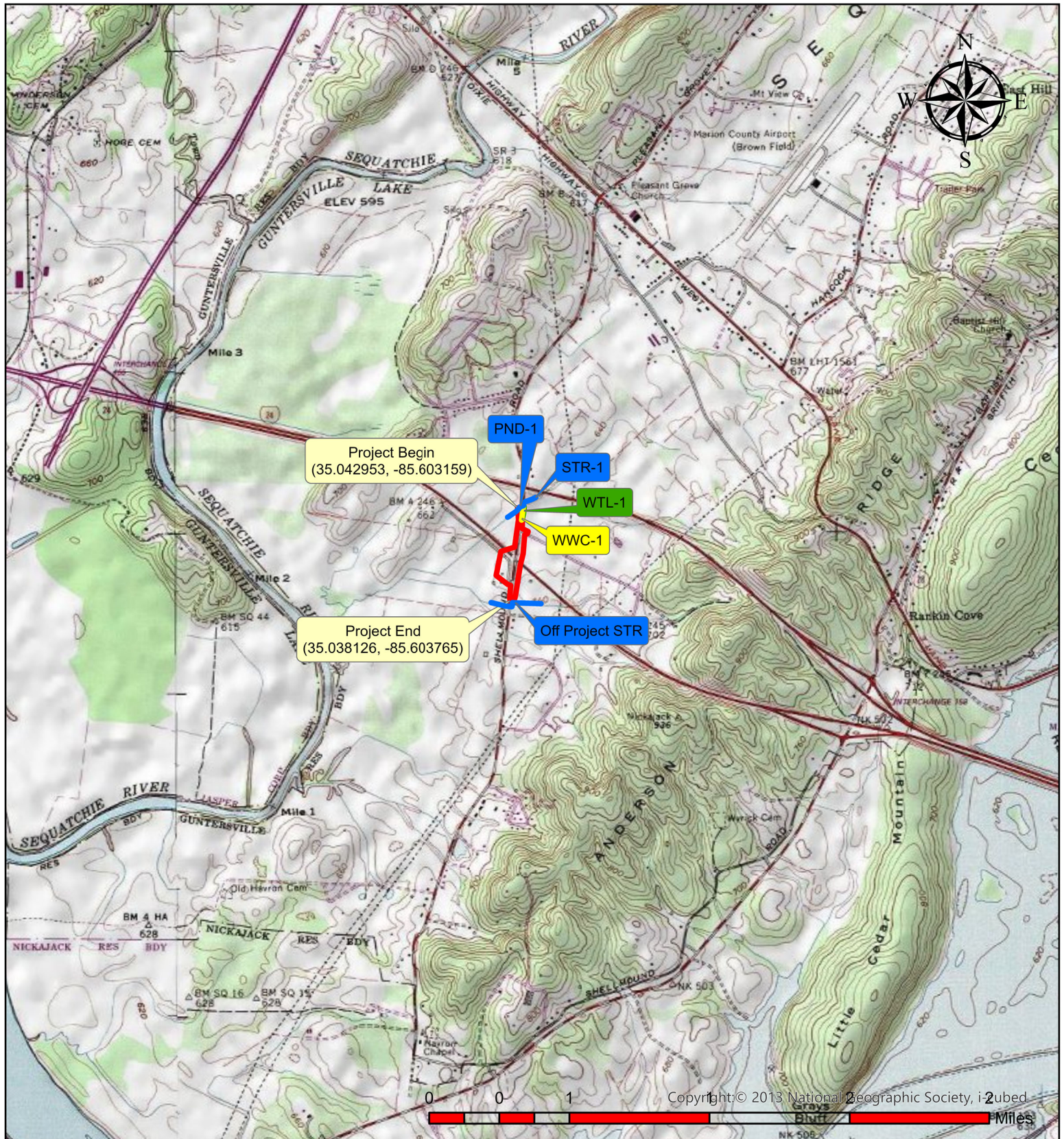
Marion Co., Shellmound Rd. LM 1.27 to LM 1.47 Bridge Replacement

11/1/2024

PIN 130902.00







## Project Location Water Resource Map

Marion Co., Shellmound Rd. LM 1.27 to LM 1.47 Bridge Replacement

11/1/2024

PIN 130902.00





<b>Project Name:</b>	Marion Co., Shellmound Rd. LM 1.27 to LM 1.47	<b>PIN:</b> 130902.00
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**Water Resource Table**

Based on: ETSA  
Date: 8/22/2024

Water Resources (Non-Wetland)					
Label	Type	Latitude	Longitude	Receiving Waters	Quality
STR-1	Intermittent Stream	35.043711	-85.601827	Sequatchie River	Unassessed
PND-1	Pond	35.043135	-85.603127	Sequatchie River	Not Applicable
WWC-1 *(130900.00-WWC-2)	Wet Weather Conveyance	35.043083	-85.602997	Sequatchie River	Not Applicable

Water Resources (Wetland)*					
Label	Type	Latitude	Longitude	Receiving Waters	Quality
WTL-1	Emergent	35.043083	-85.602997	Sequatchie River	Low Resource Value



# Ecology Field Data Sheet: Water Resources

<b>Project:</b> 130902.00 Marion Co., LM 1.29 to LM 1.47 Shellmound Rd., Bridge Replacement									
<b>Biologist:</b>	JIQ		<b>Affiliation:</b>		TDOT		<b>Date:</b>		8-21-2024
<b>1-Station:</b> from plans	N/A								
<b>2-Map label and name</b>	STR-1								
<b>3-Latitude/Longitude</b>	35.043711, -85.601827								
<b>4-Feature description:</b>									
<b>-channel identification</b>	perennial stream <input type="checkbox"/>		intermittent stream <input checked="" type="checkbox"/>		ephemeral stream <input type="checkbox"/>		wwc <input type="checkbox"/>		
<b>-HD score (if applicable)</b>									
<b>-OHWM indicators</b>	bed & banks <input checked="" type="checkbox"/>		deposition <input type="checkbox"/>		presence of litter debris <input type="checkbox"/>		scour <input type="checkbox"/>		veg absent, bent, matted <input checked="" type="checkbox"/>
	change in plant community <input checked="" type="checkbox"/>		destruction of terrestrial veg <input checked="" type="checkbox"/>		multiple observe flow events <input type="checkbox"/>		sediment sorting <input checked="" type="checkbox"/>		water staining <input checked="" type="checkbox"/>
	change in soil character <input checked="" type="checkbox"/>		leaf litter disturb or absent <input type="checkbox"/>		natural line impressed on bank <input checked="" type="checkbox"/>		shelving <input type="checkbox"/>		wracking <input type="checkbox"/>
<b>-channel bottom width</b>	3.2FT				-top of bank width		5.5FT		
<b>-width and max depth at ordinary high water mark</b>	3.2FT, 0.3FT								
<b>-width at bankfull</b>	5.5FT								
<b>-bank height</b>	LDB - 3.5FT				RDB - 3.5FT				
<b>-riffle/pool complex or other specialized habitat present?</b>	Yes								
<b>-dominant riparian species:</b> ------(LDB /RDB)-----	LDB: Ash, Cherry, Elm, Hackberry, Privet								
	RDB: Ash, Cherry, Elm, Hackberry, Privet								
<b>-particle size distribution %</b>	Silt/Sand:	70	Gravel:	20	Cobble:	10	Boulder:		Bedrock:
<b>5-photo numbers</b>	See Photolog								
<b>6-HUC -8 Code &amp; Name</b>	06020004-Sequatchie River								
<b>7-Assessed</b>	yes	<input type="checkbox"/>	no	<input checked="" type="checkbox"/>					
<b>8-ETW</b>	yes	<input type="checkbox"/>	no	<input checked="" type="checkbox"/>					
<b>9-303 (d) List</b>	yes	<input type="checkbox"/>	siltation	<input type="checkbox"/>	habitat:	<input type="checkbox"/>	other:	<input type="checkbox"/>	<input type="checkbox"/>
	no	<input checked="" type="checkbox"/>							
<b>10-Notes</b>	-Feature presents as intermittent stream. -Feature crosses under I-24 at multiple locations. -Summer drought conditions. -Isolated pool at headcut containing fish. -Strong geomorphology, moderate/weak hydrology, and biology. -All misc tribs in this waterbody will remain Not Assessed for all designated uses.								

Ecology Field Data Sheet: **Other Resource Features**  
(Caves/Rock Houses; Potential Sinkholes; Specialized Habitats; Other)

**Project:** Marion Co., LM 1.29 to LM 1.47 Shellmound Rd. Bridge **PIN #:** 130902.00

**Date of survey:** 8-21-2024 **Biologist(s):** JIQ **Affiliation:** TDOT

<b>1-Station:</b> from plans	N/A	
<b>2-Map label</b>	PND-1	
<b>3-Lat/Long</b>	35.043135, -85.603127	
<b>4-Potential impact size</b>	80 SQ FT	
<b>5-Feature name</b>	Pond	
<b>6-Feature description:</b>		
what is the feature	Retention agricultural pond	
portion affected	Entire area in ETSA	
connection to other features	STR-1 conveys hydrology	
photo number(s)	See photolog	
other information		
<b>7- HUC code &amp; name</b> if applicable (12-digit)	060200040306-Sequatchie River Outlet	
<b>8-Notes</b>	-Multiple agricultural ponds are located off project in the general area. -Presence of fish identified on survey date. -Feature act as overflow during heavy precipitation events.	



# Ecology Field Data Sheet: Water Resources

<b>Project:</b> 130902.00 Marion Co., LM 1.29 to LM 1.47 Shellmound Rd., Bridge Replacement									
<b>Biologist:</b>	JIQ		<b>Affiliation:</b>		TDOT		<b>Date:</b>		8-14-2024
<b>1-Station:</b> from plans	N/A								
<b>2-Map label and name</b>	WWC-1 *(130900.00-WWC-2)								
<b>3-Latitude/Longitude</b>	35.043083, -85.602997								
<b>4-Feature description:</b>									
<b>-channel identification</b>	perennial stream <input type="checkbox"/>		intermittent stream <input type="checkbox"/>		ephemeral stream <input type="checkbox"/>		wwc <input checked="" type="checkbox"/>		
<b>-HD score (if applicable)</b>									
<b>-OHWM indicators</b>	bed & banks <input checked="" type="checkbox"/>	deposition <input type="checkbox"/>	presence of litter debris <input type="checkbox"/>	scour <input type="checkbox"/>	veg absent, bent, matted <input checked="" type="checkbox"/>				
	change in plant community <input type="checkbox"/>	destruction of terrestrial veg <input checked="" type="checkbox"/>	multiple observe flow events <input type="checkbox"/>	sediment sorting <input type="checkbox"/>	water staining <input checked="" type="checkbox"/>				
	change in soil character <input type="checkbox"/>	leaf litter disturb or absent <input type="checkbox"/>	natural line impressed on bank <input type="checkbox"/>	shelving <input type="checkbox"/>	wracking <input type="checkbox"/>				
<b>-channel bottom width</b>	1.5FT			-top of bank width		3FT			
<b>-width and max depth at ordinary high water mark</b>	N/A								
<b>-width at bankfull</b>	N/A								
<b>-bank height</b>	LDB - 5FT				RDB - 7FT				
<b>-riffle/pool complex or other specialized habitat present?</b>	No								
<b>-dominant riparian species:</b> ------(LDB /RDB)-----	LDB: Ash, Sweetgum, Ironweed, Ragweed, Fescue, Johnson grass								
	RDB: Ash, Sweetgum, Ironweed, Ragweed, Fescue, Johnson grass								
<b>-particle size distribution %</b>	Silt/Sand: 10	Gravel: 30	Cobble: 60	Boulder:		Bedrock:			
<b>5-photo numbers</b>	See Photolog								
<b>6-HUC -8 Code &amp; Name</b>	06020004-Sequatchie River								
<b>7-Assessed</b>	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>							
<b>8-ETW</b>	yes <input type="checkbox"/>	no <input checked="" type="checkbox"/>							
<b>9-303 (d) List</b>	yes <input type="checkbox"/>	siltation <input type="checkbox"/>	habitat: <input type="checkbox"/>	other: <input type="checkbox"/>					
	no <input checked="" type="checkbox"/>								
<b>10-Notes</b>	<p>-Feature conveys precipitation driven hydrology along roadside ditch on Shellmound Rd. and drains agricultural field.</p> <p>-Discharges hydrology to small retention pond outside of ETSA.</p> <p>-Weak geomorphology, hydrology, and biology.</p> <p>-Hydric soil in channel and banks.</p> <p>-Summer drought conditions.</p>								

## Hydrologic Determination Field Data Sheet

Tennessee Division of Water Pollution Control, Version 1.5

Named Waterbody: Sequatchie River		Date/Time: 8-14-2024
Assessors/Affiliation: TDOT/JIQ		Project ID : 130902.00
Site Name/Description: WWC-1 *(130900.00-WWC-2)		
Site Location: Marion Co., LM 1.29 to LM 1.47 Shellmound Rd., Bridge Replacement		
HUC (12 digit): 060200040306		Lat/Long:
Previous Rainfall (7-days) : 0.0IN		35.043083, -85.602997
Precipitation this Season vs. Normal : abnormally wet <input type="checkbox"/> elevated <input type="checkbox"/> average <input type="checkbox"/> low <input type="checkbox"/> abnormally dry <input checked="" type="checkbox"/> unknown <input type="checkbox"/>		
Source of recent & seasonal precip data : APT		
Watershed Size : 0.18SQ MI	County: Marion	
Soil Type(s) / Geology : Lindside silt loam (Hamblen)		Source: Websoil
Surrounding Land Use : Residential/Agricultural		
Degree of historical alteration to natural channel morphology & hydrology (circle one & describe fully in Notes) : Severe <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Slight <input type="checkbox"/> Absent <input type="checkbox"/>		

### Primary Field Indicators Observed

Primary Indicators	NO	YES
1. Hydrologic feature exists solely due to a process discharge	<input type="checkbox"/>	WWC <input checked="" type="checkbox"/>
2. Defined bed and bank absent, vegetation composed of upland and FACU species	<input checked="" type="checkbox"/>	WWC <input type="checkbox"/>
3. Watercourse dry anytime during February through April 15th, under normal precipitation / groundwater conditions	<input type="checkbox"/>	WWC <input type="checkbox"/>
4. Daily flow and precipitation records showing feature only flows in direct response to rainfall	<input type="checkbox"/>	WWC <input type="checkbox"/>
5. Presence of multiple populations of obligate lotic organisms with ≥ 2 month aquatic phase	<input checked="" type="checkbox"/>	Stream <input type="checkbox"/>
6. Presence of fish (except <i>Gambusia</i> )	<input checked="" type="checkbox"/>	Stream <input type="checkbox"/>
7. Presence of naturally occurring ground water table connection	<input checked="" type="checkbox"/>	Stream <input type="checkbox"/>
8. Flowing water in channel and 7 days since last precip >0.1" in local watershed	<input checked="" type="checkbox"/>	Stream <input type="checkbox"/>
9. Evidence watercourse has been used as a supply of drinking water	<input checked="" type="checkbox"/>	Stream <input type="checkbox"/>

**NOTE: If any Primary Indicators 1-9 = "Yes", then no further investigation is necessary. However, assessors may choose to score secondary indicators as supporting evidence.**

In the absence of a primary indicator, or other definitive evidence, complete the secondary indicator table on page 2 of this sheet, and provide score below.

Guidance for the interpretation and scoring of both the primary & secondary indicators is provided in *TDEC-WPC Guidance For Making Hydrologic Determinations, Version 1.5*

**Overall Hydrologic Determination = wwc**

**Secondary Indicator Score (if applicable) = 12**

**Justification / Notes :**



## Secondary Field Indicator Evaluation

<b>A. Geomorphology</b> (Subtotal = <b>4.5</b> )		<b>Absent</b>	<b>Weak</b>	<b>Moderate</b>	<b>Strong</b>
1. Continuous bed and bank	<b>1</b>	0	1	2	3
2. Sinuous channel	<b>0</b>	0	1	2	3
3. In-channel structure: riffle-pool sequences	<b>0</b>	0	1	2	3
4. Sorting of soil textures or other substrate	<b>1</b>	0	1	2	3
5. Active/relic floodplain	<b>0</b>	0	0.5	1	1.5
6. Depositional bars or benches	<b>0</b>	0	1	2	3
7. Braided channel	<b>0</b>	0	1	2	3
8. Recent alluvial deposits	<b>0.5</b>	0	0.5	1	1.5
9. Natural levees	<b>0</b>	0	1	2	3
10. Headcuts	<b>0.5</b>	0	1	2	3
11. Grade controls	<b>.5</b>	0	0.5	1	1.5
12. Natural valley or drainageway	<b>1</b>	0	0.5	1	1.5
13. At least second order channel on existing USGS or NRCS map		<b>No=0</b>			

<b>B. Hydrology</b> (Subtotal = <b>3.5</b> )		<b>Absent</b>	<b>Weak</b>	<b>Moderate</b>	<b>Strong</b>
14. Subsurface flow/discharge into channel	<b>0</b>	0	1	2	3
15. Water in channel and >48 hours since sig. rain	<b>0</b>	0	1	2	3
16. Leaf litter in channel (January – September)	<b>1.5</b>	1.5	1	0.5	0
17. Sediment on plants or on debris	<b>0</b>	0	0.5	1	1.5
18. Organic debris lines or piles (wrack lines)	<b>0.5</b>	0	0.5	1	1.5
19. Hydric soils in channel bed or sides of channel		<b>Yes=1.5</b>			

<b>C. Biology</b> (Subtotal = <b>4</b> )		<b>Absent</b>	<b>Weak</b>	<b>Moderate</b>	<b>Strong</b>
20. Fibrous roots in channel bed <sup>1</sup>	<b>2</b>	3	2	1	0
21. Rooted plants in the thalweg <sup>1</sup>	<b>2</b>	3	2	1	0
22. Crayfish in stream (exclude in floodplain)	<b>0</b>	0	1	2	3
23. Bivalves/mussels	<b>0</b>	0	1	2	3
24. Amphibians	<b>0</b>	0	0.5	1	1.5
25. Macroinvertebrates (record type & abundance)	<b>0</b>	0	1	2	3
26. Filamentous algae; periphyton	<b>0</b>	0	1	2	3
27. Iron oxidizing bacteria/fungus	<b>0</b>	0	0.5	1	1.5
28. Wetland plants in channel bed <sup>2</sup>	<b>0</b>	0	0.5	1	1.5

<sup>1</sup> Focus is on the presence of terrestrial plants.

<sup>2</sup> Focus is on the presence of aquatic or wetland plants.

**Total Points = **12****

*Under Normal Conditions, Watercourse is a Wet Weather Conveyance if Secondary Indicator Score < 19 points*

### Notes :

- Feature conveys precipitation driven hydrology along roadside ditch on Shellmound Rd. and drains agricultural field.
- Discharges hydrology to small retention pond outside of ETSA.
- Weak geomorphology, hydrology, and biology.
- Hydric soil in channel and banks.
- Summer drought conditions.

# WETLAND DETERMINATION DATA FORM – Eastern Mountains and Piedmont Region

Project/Site: 130902.00 Marion Co., Shellmound Rd. LM 1.29 to LM 1.47 Bridge Replacement City/County: Marion Sampling Date: 8-21-2024  
Applicant/Owner: TDOT State: TN Sampling Point: WTL-1  
Investigator(s): JIQ Section, Township, Range:  
Landform (hillslope, terrace, etc.): Slope Local relief (concave, convex, none): Concave Slope (%): 2-5  
Subregion (LRR or MLRA): LRR N Lat: 35.043083 Long: -85.602997 Datum: N/A  
Soil Map Unit Name: Lindside silt loam (Hamblen) NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)  
Are Vegetation ☐ Soil ☐ or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐  
Are Vegetation ☐ Soil ☐ or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Summer drought 8-21-2024.	

## HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)		<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input checked="" type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<b>Field Observations:</b> Surface Water Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:		
Remarks:		



**VEGETATION (Five Strata) – Use scientific names of plants.**

 Sampling Point: WTL-1

Tree Stratum (Plot size: _____ )	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				<b>Prevalence Index worksheet:</b> <u>    </u> Total % Cover of:                      Multiply by: OBL species                      x 1 = <u>    </u> FACW species                      x 2 = <u>    </u> FAC species                      x 3 = <u>    </u> FACU species                      x 4 = <u>    </u> UPL species                      x 5 = <u>    </u> Column Totals: <u>0</u> (A) <u>0</u> (B)  Prevalence Index = B/A = <u>    </u>
Sapling Stratum (Plot size: _____ )				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Shrub Stratum (Plot size: _____ )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				
Herb Stratum (Plot size: _____ )				<b>Definitions of Five Vegetation Strata:</b>  <b>Tree</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and 3 in. (7.6 cm) or larger in diameter at breast height (DBH).  <b>Sapling</b> – Woody plants, excluding woody vines, approximately 20 ft (6 m) or more in height and less than 3 in. (7.6 cm) DBH.  <b>Shrub</b> – Woody plants, excluding woody vines, approximately 3 to 20 ft (1 to 6 m) in height.  <b>Herb</b> – All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.  <b>Woody vine</b> – All woody vines, regardless of height.
1. <i>Carex cherokeensis</i>	40	Y	FACW	
2. <i>Eupatroides serotinum</i>	10	N	FACW	
3. <i>Vernonia gigantea</i>	10	N	FAC	
4. <i>Cyperus strigosus</i>	20	Y	FACW	
5. <i>Sorghum halepense</i>	10	N	FACU	
6. <i>Schedonorus arundinaceus</i>	10	N	FACU	<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	
<u>100</u> = Total Cover 50% of total cover: <u>50</u> 20% of total cover: <u>20</u>				
Woody Vine Stratum (Plot size: _____ )				
1. _____	_____	_____	_____	Remarks: (Include photo numbers here or on a separate sheet.)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>0</u> = Total Cover 50% of total cover: <u>0</u> 20% of total cover: <u>0</u>				

## SOIL

Sampling Point: WTL-1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-6	10YR 4/2	95	10YR 5/6	5	C	M	Clay/Loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ 2 cm Muck (A10) (LRR N)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Sandy Mucky Mineral (S1) (LRR N, MLRA 147, 148)  
☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)

☐ Dark Surface (S7)  
☐ Polyvalue Below Surface (S8) (MLRA 147, 148)  
☐ Thin Dark Surface (S9) (MLRA 147, 148)  
☐ Loamy Gleyed Matrix (F2)  
☒ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)  
☐ Iron-Manganese Masses (F12) (LRR N, MLRA 136)  
☐ Umbric Surface (F13) (MLRA 136, 122)  
☐ Piedmont Floodplain Soils (F19) (MLRA 148)  
☐ Red Parent Material (F21) (MLRA 127, 147)

Indicators for Problematic Hydric Soils<sup>3</sup>:

☐ 2 cm Muck (A10) (MLRA 147)  
☐ Coast Prairie Redox (A16) (MLRA 147, 148)  
☐ Piedmont Floodplain Soils (F19) (MLRA 136, 147)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present?

Yes☒

No☐

Remarks:



## Tram User Guide

<b>SITUATION</b>	<b>TRAM REQUIRED</b>
• Wetland is a “roadside ditch” and not part of a larger wetland – constructed primarily to convey runoff.....	NO, COMPLETE EXCEPTIONAL STATUS WETLAND SECTION ONLY
• Fringe wetlands associated with ponds, impoundments, reservoirs, large lakes.....	YES- USE NON-HGM TRAM
• Created Depression wetlands, semi-permanent to permanently inundated (<6.6-feet deep).....	YES-USE NON-HGM TRAM
• Wetland impacts greater than 0.10 acre.....	YES

**NOTE: The Exceptional Status Wetland section must be completed for all proposed wetland alterations, including wetlands situations where HGM assessment is not required or the Non-HGM TRAM is used, including proposed wetlands impacts less than 0.10 acre.**

An affirmative response to 1-6 of the Decision Table identifies the wetland per rule as an Outstanding Natural Resource Water (ONRW) or Exceptional Tennessee Waters (ETW). A positive response to 7-13 requires a final determination by the Department.

#	Wetland Feature Decision Table	Yes/No	Affirmative Result
1	The wetland has been designated as an <b>Outstanding Natural Resource Water (ONRW)</b> by the Department under 0400-40-03-.06(5)(a).	No	ONRW
2	The wetland has previously been designated and documented as an Exceptional Tennessee Water (ETW) by the Department under 0400-40-03-.06(4)(a)(7)	No	ETW
3	The wetland is within state or national parks, wildlife refuges, forests, wilderness areas, natural areas, or is a designated State Scenic Rivers or Federal Wild and Scenic Rivers.	No	ETW
4	The wetland is known to contain a documented non-experimental population of state or federally listed threatened or endangered aquatic or semi-aquatic plants, or aquatic animals.	No	ETW
5	The wetland or the area it is in has been designated by the U.S. Fish and Wildlife Service as " <b>Critical Habitat</b> " for any threatened or endangered aquatic or semi-aquatic plant or aquatic animal species.	No	ETW
6	The wetland falls within an area designated as Lands Unsuitable for Mining pursuant to the federal Surface Mining Control and Reclamation Act where such designation is based in whole or in part on impacts to water resource values	No	ETW
7	<b>The wetland exhibits outstanding ecological or recreational values such as, but not limited to, those as outlined in 8-12</b>	No	Determination Required by TDEC
8	The wetland fits within the species composition concept for any plant community found in the state of Tennessee <b>ranked G2, G1, or more imperiled</b> at the "Association" classification level according to the NatureServe and Natural Heritage Ranking system (e.g. "bog", "fen", and "wet prairie/barren" communities).	No	Determination Required by TDEC
9	The wetland is <b>an uncommon resource</b> (e.g. vernal pools, headwater wetlands, sinks, spring/seeps, glades, newly described communities, high recreational or socioeconomic value) in the region and/or is deemed such by concurrence of qualified scientists.	No	Determination Required by TDEC
10	The wetland is an <b>older aged forested wetland</b> comprised of overstory trees with an average diameter at breast height (dbh) being <b>greater than or equal to 30</b> in within the WAA.	No	Determination Required by TDEC
11	The wetland is observed and documented to be a <b>significant waterfowl, songbird, shorebird, amphibian, bat, fish habitat area</b> . These may include rookeries, migratory congregations, nesting sites, breeding areas, etc.	No	Determination Required by TDEC
12	The wetland is <b>hydrologically connected</b> to and/or has significant ecological contribution to an <b>ETW</b>	No	Determination Required by TDEC
13	The wetland has High Resource Value as determined by a <b>score of 75 and above</b> using the TRAM or non-HGM TRAM (to be determined after completing the quantitative portion of this manual)	No	Determination Required by TDEC

End of Narrative Rating. Begin Quantitative Rating on Next Page.



## Quantitative Rating

### Value Added Section

**Wetland Size** – Wetland size may increase particular wetland functions or provide greater habitat value to wildlife. In some regions, large wetlands or wetlands of certain types may be rare and may play a vital and significant local and/or regional ecological role. Refer to Tables 1 through 3 below for assessing value added points to wetland size.

**Other Significant Value** – See Table 4 for value added due to other significant wetland values

### Critical Sizes for Tennessee Wetlands by HGM Class and Region of State

<b>Table 1. Depression wetland size throughout Tennessee (max 5 pts).</b> Estimate the area of wetland. Select the appropriate size class and assign score.	<b>Score</b>
≥5 acres	5
3 - <5 acres	3

<b>Table 2. Slope and Flat wetland size throughout Tennessee (max 5 pts).</b> Estimate the area of wetland. Select the appropriate size class and assign score.	<b>Score</b>
≥50 acres	5
25 - <50 acres	3
10 - <25 acres	2
5 - <10 acres	1

<b>Table 3. Riverine wetland size in central and eastern Tennessee (max 5 pts).</b> Estimate the area of wetland. Select the appropriate size class and assign score.	<b>Score</b>
≥50 acres	5
25 - <50 acres	3
10 - <25 acres	2
5 - <10 acres	1

<b>Table 4. Other significant value (max 5 pts).</b> Estimate the area of wetland. Select the appropriate size class and assign score.	<b>Score</b>
Wetland falls within a category <b>from lines 8-12 of the Exceptional Status Wetlands Decision Table</b> (pg. 18) but has not been determined by TDEC to qualify for Exceptional Tennessee Waters status.	5

No value added = 0



TH001781: STR-1 facing upstream before inlet on I-24.



TH001780: STR-1 facing downstream towards inlet on I-24.





TH001745: STR-1 and WWC-1 \*(130900.00-WWC-2) confluence before crossing under shellmound Road.



TH001743: PND-1 on Shellmound Road.





TH001747: WWC-1 \*(130900.00-WWC-2) facing upgradient at inlet.

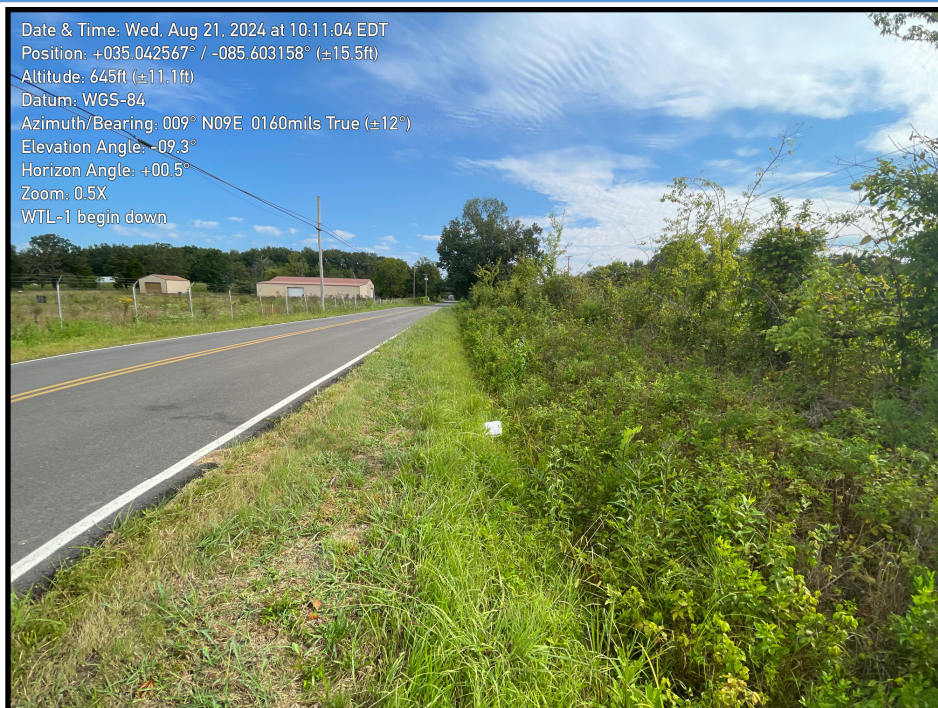


TH001746: WWC-1 \*(130900.00-WWC-2) facing downgradient at inlet.





TH001770: WTL-1 facing upgradient before WWC-1 \*(130900.00-WWC-2) and STR-1 confluence.



TH001771: WTL-1 facing downgradient towards WWC-1 \*(130900.00-WWC-2) and STR-1 confluence.





## Tennessee Ecological Services Field Office

FWS Log No: 2024-0145040

The Service concurs with your effect determination(s) for resources protected by the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.). This finding fulfills the requirements of the Act. If project design changes are made or new information becomes available, please submit new plans for review.

Field Supervisor

Date



---

**[EXTERNAL] 130900.00 and 130902.00 Marion Co., I-24 and Shellmound Road Bridge Replacements-Updated Consultation**

---

**From** James Quilliams <James.Quilliams@tn.gov>

**Date** Mon 6/9/2025 12:37 PM

**To** TDOT\_USFWS <tdot\_usfws@fws.gov>

**Cc** Harris, Abigail N <abigail\_harris@fws.gov>; Giddens, David W <david\_giddens@fws.gov>

 2 attachments (643 KB)

USFWS Response 130902.00 10-8-2024.pdf; USFWS Response 130900.00 10-8-2024.pdf;

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Abigail Harris,

This email is in response to a conversation I had with Wesley Giddens today, 6/9/2025. I inquired about two projects (130900.00 and 130902.00) that were originally coordinated with John Griffith on 10/8/2024 (attached), resulting in the request of a bat survey for the project study area. After speaking with Wesley, it was determined that a bat study would not be sufficient consultation for these projects and the USFWS would propose the time of year tree clearing restrictions (November 16<sup>th</sup> through March 31<sup>st</sup>) for both projects instead. Please see below the proposed tree clearing consultation commitment for projects 130900.00 and 130902.00. Please let me know if you need any additional information and it will be provided.

(PIN 130900.00)

Thank you for your time reviewing the subject project: PIN 130900.00 Marion Co., I-24 Bridge replacement over Shellmound Road. Based on your response of the proposed project being located in the winter buffer for the federally endangered Indiana bat (*Myotis sodalis*) and the proposed federally endangered tricolored bat (*Perimyotis subflavus*), TDOT has committed to perform all tree clearing activities in the timeframe of November 16<sup>th</sup> through March 31<sup>st</sup>. In adherence to the proposed scope of work, and the aforementioned tree clearing commitment, TDOT concludes the subject project will “not likely adversely affect” the federally endangered Indiana bat (*Myotis sodalis*) or the proposed federally endangered tricolored bat (*Perimyotis subflavus*).

I would appreciate your review and comment regarding concurrence or other findings for these determinations.

The above coordination is in compliance with the U.S. Fish and Wildlife Coordination Act of 1958 and the Endangered Species Act of 1973, as amended. Thank you for your assistance with this project. If you have any questions or need additional information, please contact me at 423-463-6103.

(PIN 130902.00)

Thank you for your time reviewing the subject project: PIN 130902.00 Marion Co., Shellmound Road bridge replacement over I-24. Based on your response of the proposed project being located in the winter buffer for the federally endangered Indiana bat (*Myotis sodalis*) and the proposed federally endangered tricolored bat (*Perimyotis subflavus*), TDOT has committed to perform all tree clearing activities in the timeframe of November 16<sup>th</sup> through March 31<sup>st</sup>. In adherence to the proposed scope of work, and the aforementioned tree clearing commitment, TDOT concludes the subject project will “not likely adversely affect” the federally endangered Indiana bat (*Myotis sodalis*) or the proposed federally endangered tricolored bat (*Perimyotis subflavus*).

I would appreciate your review and comment regarding concurrence or other findings for these determinations.

The above coordination is in compliance with the U.S. Fish and Wildlife Coordination Act of 1958 and the Endangered Species Act of 1973, as amended. Thank you for your assistance with this project. If you have any questions or need additional information, please contact me at 423-463-6103.

Kind Regards,  
James Ian Quilliams



**James “Ian” Quilliams** | Senior Technical Specialist-Ecology

Region 2 Environmental Section

7512 Volkswagen Drive, Chattanooga, TN 37416

p. 423-510-1101 c. 423-463-6103

[james.quilliams@tn.gov](mailto:james.quilliams@tn.gov)

[tn.gov/tdot](http://tn.gov/tdot)

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-



**From:** [Griffith, John](#)  
**To:** [Dennis Crumby](#)  
**Cc:** [Sikula, Nicole R](#); [Andy Barlow](#)  
**Subject:** [EXTERNAL] Re: IPaC delivered Official Species List for project: TDOT PIN 130902.00 Marion County Shellmound Road, Bridge over I-24 Eastbound (TMA)  
**Date:** Tuesday, October 8, 2024 3:04:05 PM

---

**This Message Is From an External Sender**

This message came from outside your organization.

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Dennis,

Thank you for your correspondence regarding the proposed Shellmound Road Bridge over Interstate 24 at LM 1.36 in Marion County, Tennessee. The scope of work would involve replacement of the existing bridge with a 160-foot-long, 2-span, concrete beam bridge. The typical section on the proposed structure would consist of two 11-foot lanes with 4-foot shoulders. The bridge alignment would be shifted to the east, requiring the project to be extended 0.11-mile to the north and 0.12-mile to the south to tie in the approaches. Tree removal would be required for the project. You are requesting a list of federally threatened or endangered species that may be present in the project area.

Our database indicates that the project lies within the swarming areas of Nickajack Cave, a document hibernaculum for the federally endangered Indiana bat (*Myotis sodalis*), and Little Cedar Mountain Cave, a documented hibernaculum for the proposed endangered tricolored bat (*Perimyotis subflavus*). A qualified individual should assess potential impacts to these species as a result of the project. As a designated representative for the Federal Highway Administration (FHWA), the Tennessee Department of Transportation may submit its assessment and findings directly to this office for review and concurrence. A finding of "may affect" can be addressed through formal consultation by the FHWA, except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species.

This email will serve as our official project response. Please let me know if we can offer further assistance. Thanks,

John Griffith  
Transportation Biologist  
U.S. Fish and Wildlife Service  
Tennessee Field Office  
931-444-1393 (office)  
931-261-3755 (cell)

---

**From:** Administrator Email <ecosphere\_support@ecosphere.fws.gov>

**Sent:** Wednesday, September 18, 2024 3:02 AM

**To:** Griffith, John <john\_griffith@fws.gov>; Tennessee ES, FWS <tennesseeES@fws.gov>; Sykes,

Robbie <robbie\_sykes@fws.gov>; Alexander, Steven <steven\_alexander@fws.gov>

**Subject:** IPaC delivered Official Species List for project: TDOT PIN 130902.00 Marion County  
Shellmound Road, Bridge over I-24 Eastbound (TMA)

**To:** IPaC point(s) of contact for Tennessee Ecological Services Field Office

**Project Location:** Marion County, Tennessee

IPaC has delivered an official Section 7 species list on behalf of your office. For your convenience, IPaC has created an ETK project ([2024-0145040](#)) with a new associated 'Species List Provided' event. A PDF file of the species list document is attached to the event and contact information for the project can be found on the last page of the PDF.

**IPaC has automatically set the consultation status to "Closed". If you need to do any additional work in this project (e.g., add staff, add events, change lead office, etc.), you must first change the status to "active" so that you can edit the project. You can access the project via the link, above.**

**Lead FWS Office:**

The Tennessee Ecological Services Field Office is currently designated as the lead office for Section 7 on this project. The following additional offices have jurisdiction and have been notified: None. If another office is the lead office on this project, please access the project (via the link above) and update it. IPaC will not reset the Lead Office once it has been updated by a biologist.

\*Projects created in ETK by IPaC have not been assigned to an FWS staff member. To identify the staff assigned to this project, please access the project (via the link above) and add their name(s).



## TENNESSEE WILDLIFE RESOURCES AGENCY

ELLINGTON AGRICULTURAL CENTER  
5107 EDMONDSON PIKE  
NASHVILLE, TENNESSEE 37211

10/15/2024

Dennis Crumby / Ecology Section  
Environmental Division  
James K. Polk BLDG., Suite 900  
505 Deaderick Street  
Nashville, TN 37242-0334  
p. 615-253-2465 c. 615-761-8513

RE: Marion County; Shellmound Road, Bridge over I-24 Eastbound (TMA) PIN 130902.00

Dear Mr. Crumby,

The Tennessee Wildlife Resources Agency has reviewed the information provided for the proposed bridge replacement for the Shellmound Road Bridge over I-24 Eastbound (TMA) in Marion County, Tn. You have requested that we provide your office with a list of threatened or endangered species that may be present in the vicinity of the proposed project.

Our databases show documented occurrences of multiple state listed species within 4.0 miles for the project location however, based on the scope of work and location of the project our agency does not anticipate significant adverse impacts to these species provided that all applicable TDEC and US EPA approved Erosion Prevention/Silt Control measures and Best Management Practices be planned for, implemented, monitored, and maintained throughout construction.

Thank you for the opportunity to review and comment on this proposed project. If I may be of further assistance, please contact me at [Andy.Barlow@tn.gov](mailto:Andy.Barlow@tn.gov).

Sincerely,

Andy Barlow  
Wildlife Biologist/Liaison to TDOT and the Federal Highway Administration

The State of Tennessee

AN EQUAL OPPORTUNITY, EQUAL ACCESS, AFFIRMATIVE ACTION EMPLOYER



## Dennis Crumby

---

**From:** twrasurveymgmt@gmail.com  
**Sent:** Tuesday, September 17, 2024 10:28 AM  
**To:** Dennis Crumby; Andy Barlow  
**Subject:** [EXTERNAL] Environmental Review Request: 1726592400000

### **This Message Is From an External Sender**

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Dennis Crumby

**\*\*Auto-generated email\*\***

DO NOT REPLY

Tennessee Wildlife Resource Agency has received your submission. If additional information is required, Biodiversity Division staff will reach out via the contact information you provided. Although we strive to respond to review requests as quickly as possible, a formal response may take up to 30 days.

Thank you,

TWRA Biodiversity

Index Of Sheets

TITLE SHEET.....	1
TYPICAL SECTIONS.....	2B, 2B1
RIGHT-OF-WAY ACQUISITION TABLE and PROPERTY MAP.....	3A - 3B
PRESENT LAYOUT.....	4
RIGHT-OF-WAY DETAILS.....	4A
PROPOSED LAYOUT.....	4B
PROPOSED PROFILE.....	4C
SIDE ROAD PROFILE.....	5
DRAINAGE MAP.....	6
ROADWAY CROSS SECTIONS.....	7 - 18

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENGINEERING

MARION COUNTY

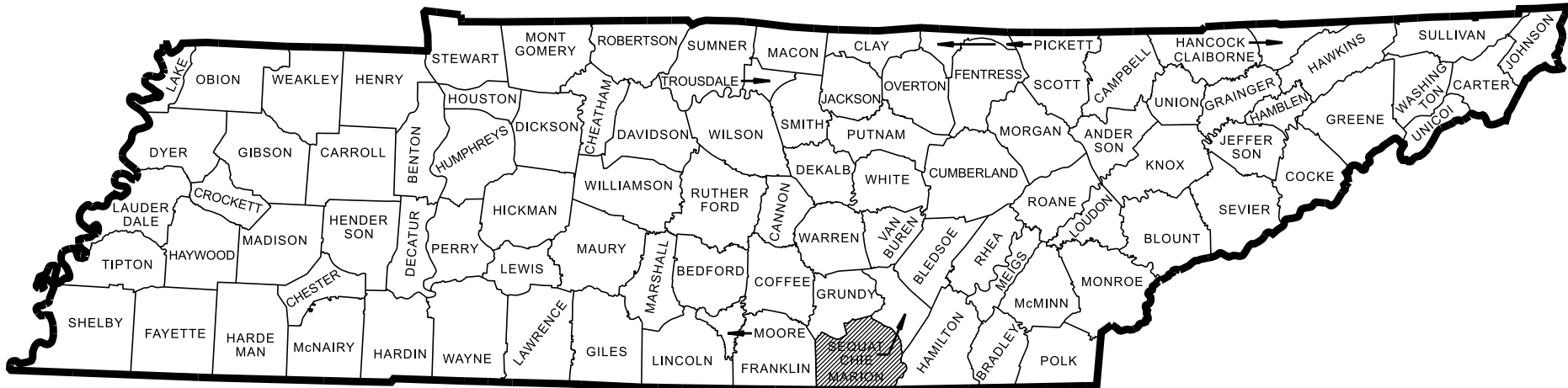
SHELLMOUND ROAD  
BRIDGE OVER INTERSTATE 24 EASTBOUND  
(LOG MILE 1.36)

LINE AND GRADE  
BRIDGE REPLACEMENT

STATE HIGHWAY NO. N/A F.A.H.S. NO. N/A

DOES THIS PROJECT QUALIFY FOR UTILITY CHAPTER 86	YES X	NO
---	-------	----

TENN.	YEAR	SHEET NO.
	2025	1
FED. AID PROJ. NO.	BR-I-24-2(184)	
STATE PROJ. NO.	58100-0187-44	



MARION COUNTY  
BRIDGE ID. # 58100240039

NO EXCLUSIONS

ROAD TO BE CLOSED  
DURING CONSTRUCTION

LINE  
AND  
GRADE

SEALED BY

APPROVED:   
WILL REID, CHIEF ENGINEER

DATE:

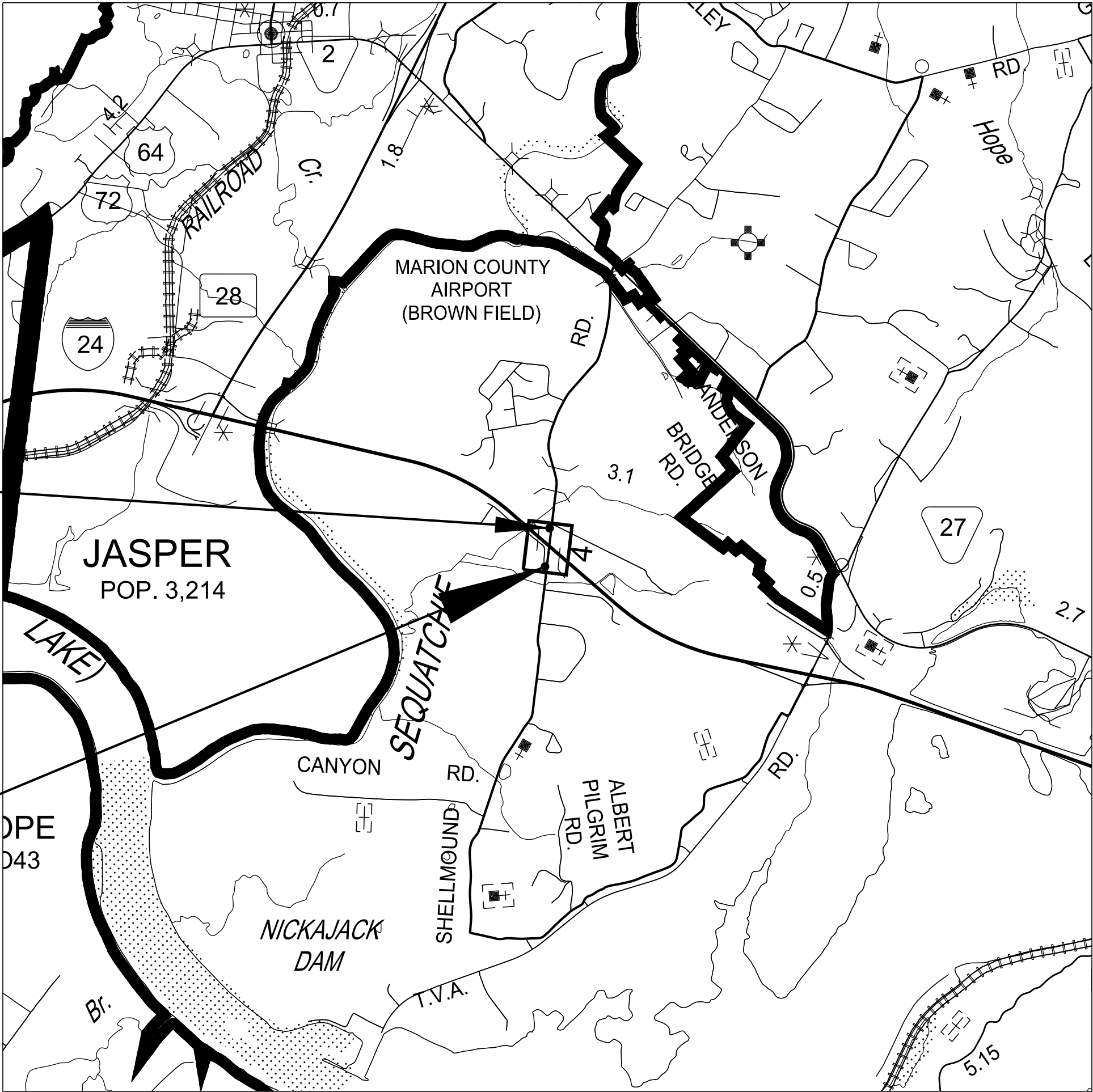
APPROVED:   
HOWARD H. ELEY, COMMISSIONER

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: \_\_\_\_\_  
DIVISION ADMINISTRATOR DATE

SURVEY 05-06-24	TRAFFIC DATA	
	ADT (2026)	1,750
	ADT (2046)	1,930
	DHV (2046)	232
	D	65 - 35
	T (ADT)	3 %
	T (DHV)	2 %
	V	30 MPH

COORDINATES ARE NAD/83(2011) ADJUSTED BY  
THE FACTOR OF 0.99998 AND TIED TO THE TGRN. ALL ELEVATIONS  
ARE REFERENCED TO THE NAVD 1988 USING GEOID18 MODEL



SCALE: 1"= 2640'

R.O.W. LENGTH	0.000 MILES
ROADWAY LENGTH	0.149 MILES
BRIDGE LENGTH	0.029 MILES
BOX BRIDGE LENGTH	0.000 MILES
BOX BRIDGE LENGTH	0.000 MILES ▲
PROJECT LENGTH	0.178 MILES

Not included in the project length (Non Riding Surface).

58100-0187-44  
END PROJECT NO. BR-I-24-2(184) PRELIMINARY  
STA. 65+90.00 SHELLMOUND RD  
N 258108.1342 E 2087221.9278

58100-0187-44  
BEGIN PROJECT NO. BR-I-24-2(184) PRELIMINARY  
STA. 56+50.00 SHELLMOUND RD  
N 257174.6896 E 2087111.1073

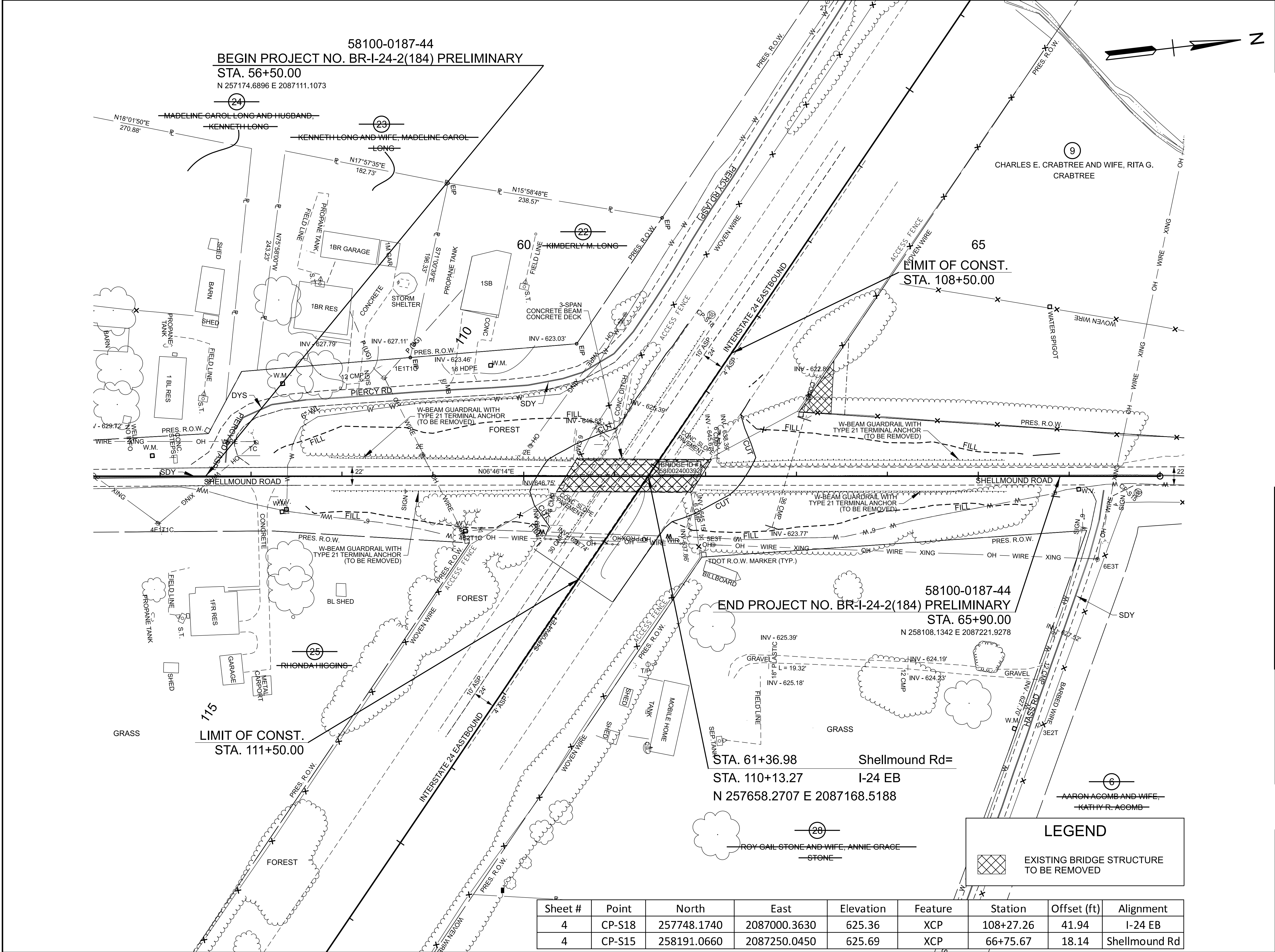
SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES  
CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW  
THE REASONABLE COST ANALYSIS VALUE.

THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF  
THE TENNESSEE DEPARTMENT OF TRANSPORTATION DATED JANUARY 1, 2021 AND  
ADDITIONAL SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS  
AND IN THE PROPOSAL CONTRACT.

TDOT PROJECT MANAGER: CHANEL HIPPIX, PMP  
DESIGNED BY: ARCADIS U.S., INC.  
DESIGNER : MARC HAWKINS, P.E. CHECKED BY : FRITZ BROGDON, P.E.  
P.E. NO. 58100-0187-44 (NEPA)  
PIN NO. 130902.00

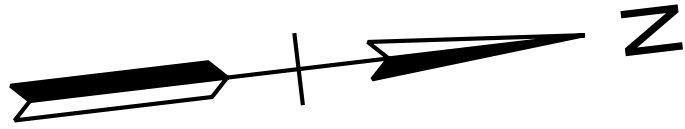
TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2025	58100-0187-44	4
-	-	-	-
-	-	-	-



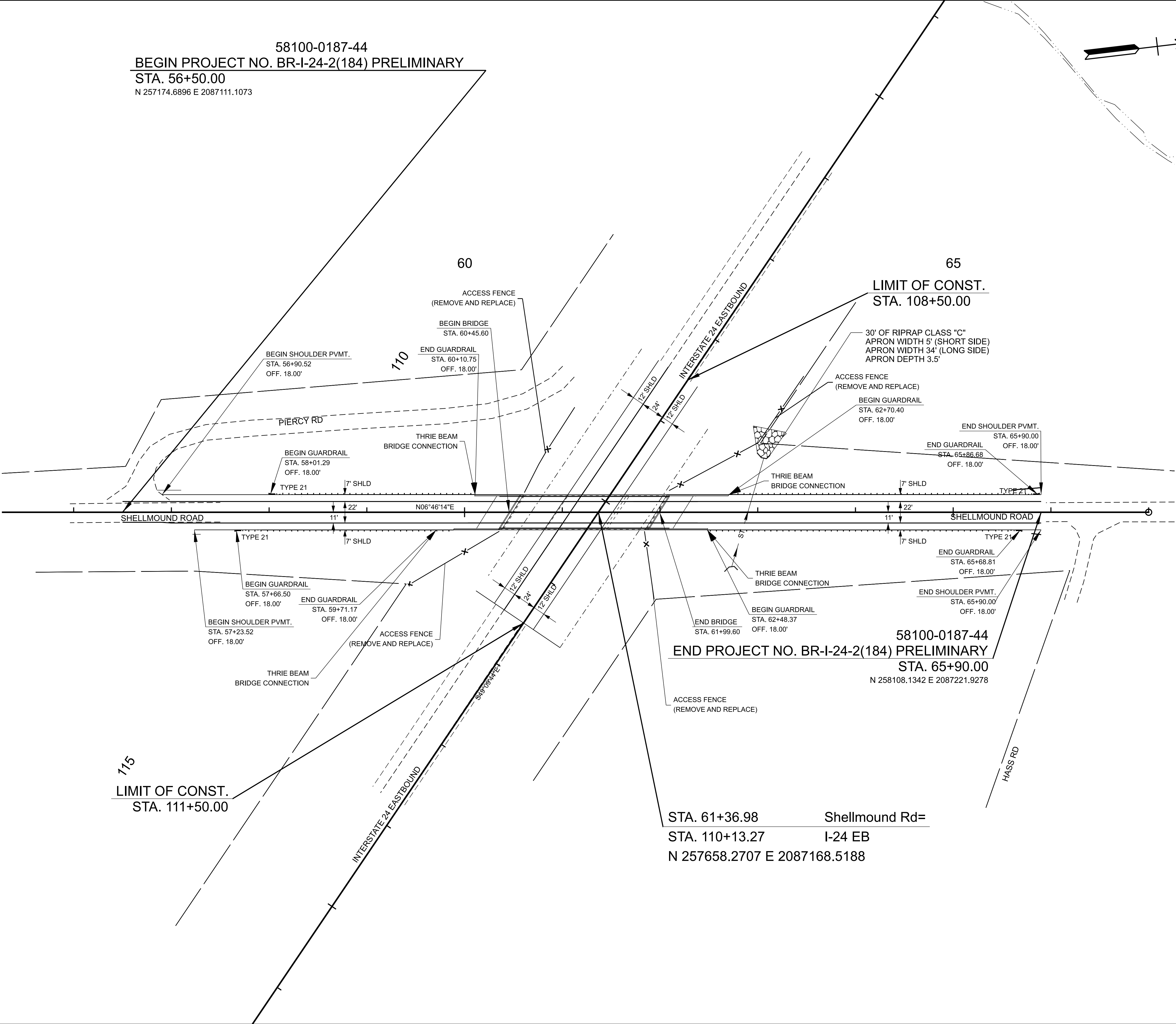
Sheet #	Point	North	East	Elevation	Feature	Station	Offset (ft)	Alignment
4	CP-S18	257748.1740	2087000.3630	625.36	XCP	108+27.26	41.94	I-24 EB
4	CP-S15	258191.0660	2087250.0450	625.69	XCP	66+75.67	18.14	Shellmound Rd



TYPE	YEAR	PROJECT NO.	SHEET NO.
PRELIM.	2025	58100-0187-44	4B



58100-0187-44  
BEGIN PROJECT NO. BR-I-24-2(184) PRELIMINARY  
STA. 56+50.00  
N 257174.6896 E 2087111.1073



# LINE AND GRADE

SEALED BY

COORDINATES ARE NAD 83(2011), ARE  
DATUM ADJUSTED BY THE FACTOR  
OF 0.99998 AND TIED TO THE TGRN.  
ALL ELEVATIONS ARE REFERENCED  
TO THE NAVD 1988 WITH GEOID 18.

STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION

PROPOSED  
LAYOUT

STA. 57+00.00 TO STA. 67+00.00  
SCALE: 1" = 50'